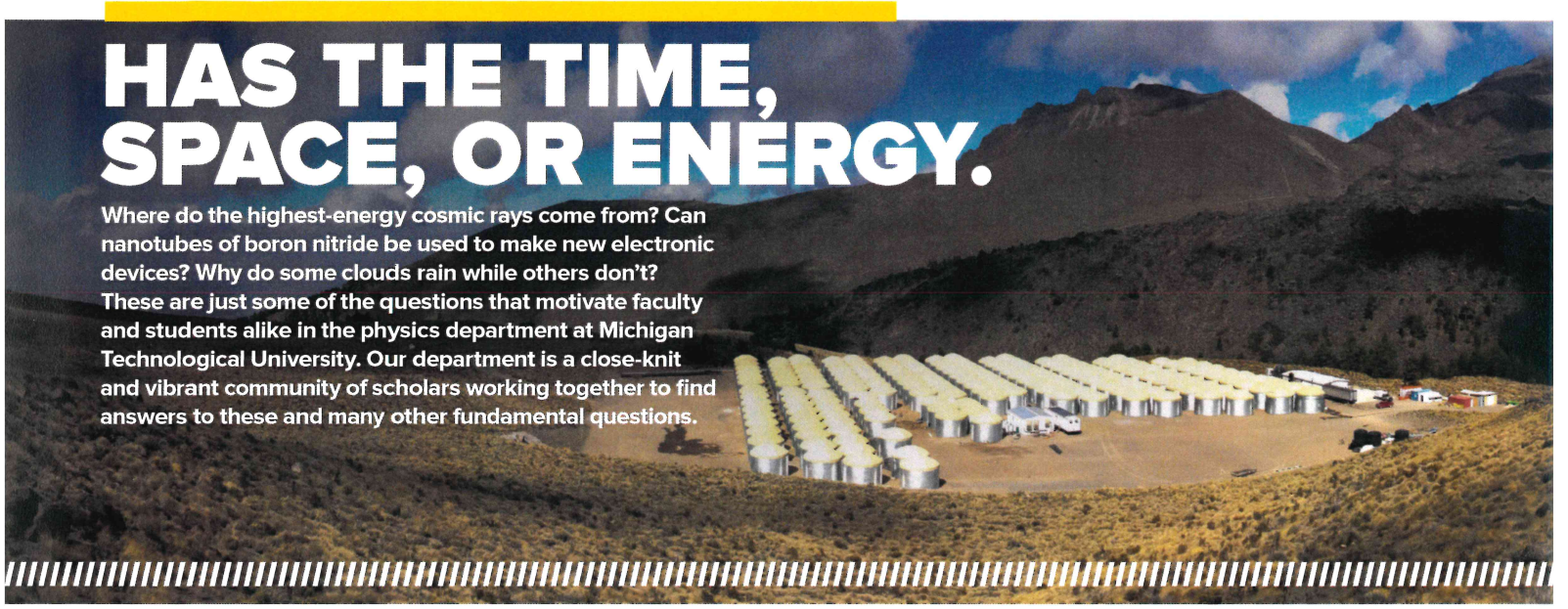
Michigan Tech

Grad School / *like no other*

MS, PhD—Physics
MS, PhD—Applied Physics
Department of Physics

NO OTHER GRAD PROGRAM

HAS THE TIME, SPACE, OR ENERGY.



Where do the highest-energy cosmic rays come from? Can nanotubes of boron nitride be used to make new electronic devices? Why do some clouds rain while others don't? These are just some of the questions that motivate faculty and students alike in the physics department at Michigan Technological University. Our department is a close-knit and vibrant community of scholars working together to find answers to these and many other fundamental questions.

What you'll work on

Faculty in the department have five areas of research interest: astrophysics and particle astrophysics; atmospheric physics; materials physics; photonics and quantum optics; and atomic, molecular, and optical physics. Some of the current research projects include first principles studies of structure-property relationships in 2-D nanomaterials beyond graphene for defense applications, and the influence of nucleation on ice microphysical properties of mixed-phase stratiform clouds and many additional projects.

Where you'll work

A recent $2.5 million renovation provided major upgrades in our classroom technology. We have seven laboratories including a cloud physics lab, a materials physics and laser physics lab, and an integrated magneto-photonics lab. In addition, we have three observatories, including access to the Pierre Auger Cosmic Ray Observatory in Argentina, as well as a machine shop, and advanced research computing workstations and clusters.

Who you'll work with

The department is home to 23 active research faculty, and we have strong interdisciplinary collaborations with other departments and institutes including materials science and engineering, electrical and computer engineering, and mechanical engineering–engineering mechanics.

Why you'll choose Tech

Michigan Technological University is recognized worldwide for innovative education and scholarship. We explore the boundaries of knowledge, develop new technologies, and prepare students like no other.

Michigan Tech is a leading public research university, home to more than 7,000 students from more than 50 countries around the world. Founded in 1885, the University offers more than 120 graduate and undergraduate degree programs in science and technology, forestry, business and economics, health professions, humanities, mathematics, and social sciences. Our beautiful campus in Michigan's Upper Peninsula overlooks the Keweenaw Waterway and is just a few miles from Lake Superior.

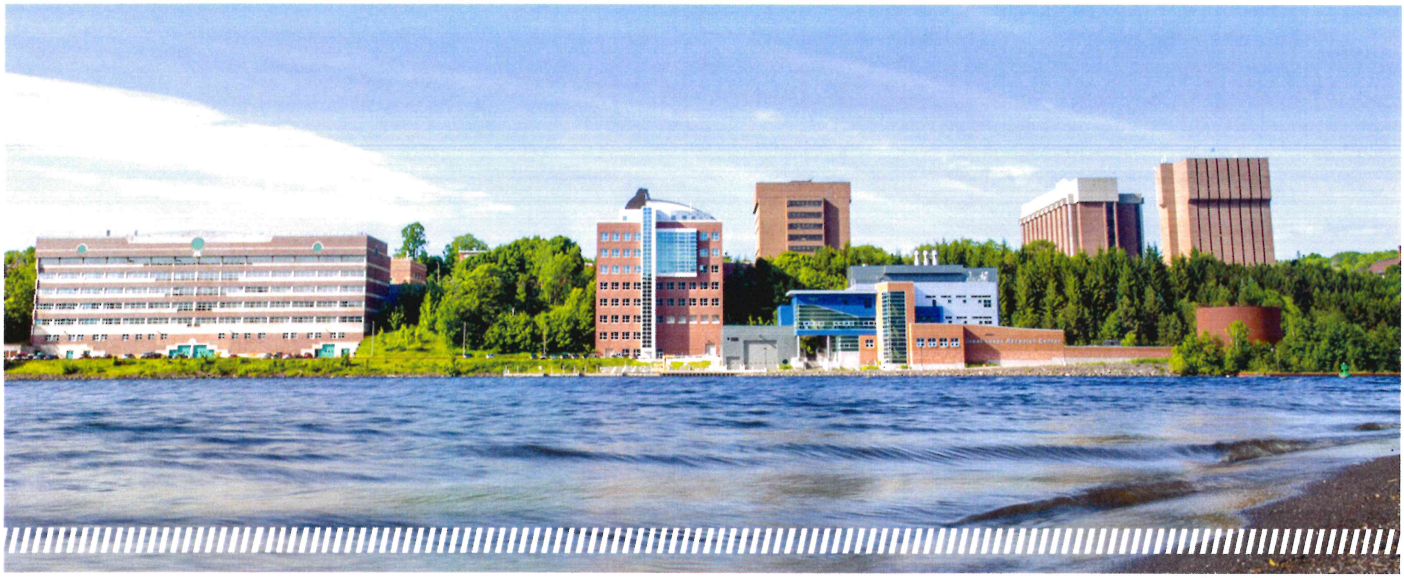
"We are shedding light on dark matter and other unsolved puzzles of our Universe"

Petra Huentemeyer
Professor, Physics

Where and how are cosmic rays produced and accelerated to their states of high energy? The study of gamma rays provides a crucial piece of the puzzle. By measuring energy spectra, source morphologies, and spatial correlation of source wavelengths, we are trying to solve the century-old puzzle of the origin of galactic cosmic rays.

Learn more: mtu.edu/gradschool/physics

mtu.edu/gradschool



Admission requirements

Application deadline: Apply by February 1 for the fall semester. Applications are reviewed on an individual basis using a holistic approach.

All Students

- Graduate School application
- Student Statements
- Official transcripts
- GRE required (Tech students exempt)
- Three letters of recommendation
- Admitted applicants typically have an undergraduate GPA of 3.0/4.0

International Students

- TOEFL: Recommended score of 88 iBT

Finance your future

Earning your graduate degree is an investment in your career and your future.

Please visit mtu.edu/gradschool/funding to learn more about the latest information on the cost of education and the sources of funding to support your graduate studies.

More information on financial aid opportunities is available by contacting Michigan Tech's Financial Aid Office at 906-487-2622 or finaid@mtu.edu.

APPLYING IS EASY—AND FREE

mtu.edu/gradschool/apply

Department of Physics

Michigan Technological University

Phone 906-487-2086 • Email physics@mtu.edu

mtu.edu/physics

Michigan Tech

Grad School / *like no other*